

## ABSTRACT

The Biomimetic Sonar invention ensonifies submerged objects, digitizes acoustic images reflected from the ensonified objects, and classifies and stores the digitized images using  
5 electronic processing derived from that believed to be used by *Tursiops truncatus*, the bottlenose dolphin. The invention also provides a probable identification of an ensonified object based on comparison of an ensonified object with templates in a library of acoustic images.